



Faculty of Computer Science and Information Technology

***SALON MANAGEMENT SYSTEM FOR LING NA UNISEX HAIR SALOON IN
ENKILILI***

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Bachelor of Computer Science with Honours (Information System)

2020



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ABSTRACT

The proposed salon management system is the web-based application used for Ling Na Unisex Hair Saloon in Engkilili to improve the efficiency in their management. This salon is currently using the manual procedure to manage the business and involves a lot of paperwork. The customers are using the Whatsapp, email and phone call to make the appointment and the staff of Ling Na Unisex Saloon will note down the appointment details on the piece of paper. Through this method, a lot of problems are faced by customer and staff such as misplacement of the appointment, wrong information is recorded and long queue which leads to time wastage. Besides, the staff also does not have a proper way to manage the product and they always make the stock take manually. The staff also don't have enough time to recommend the product to the customers and this will cause poor product selling. Another problem is the salon does not record the customer information. The customer information is the information that must be included in the appointment details to ease the appointment management. Thus, the proposed salon management system is developed to help the Ling Na Unisex Hair Saloon to solve the problem and improve the efficiency in their management. The proposed salon management is helping the customer to make the online appointment and the appointment details are recorded in the database. The staff can manage the appointment easily by using the proposed system and they also can manage their product through the product catalog. Furthermore, the customer details are recorded once they register their account and every appointment details are containing the customer information to help the salon to identify which customer makes this appointment.

ABSTRAK

Sistem pengurusan salon yang dicadangkan adalah web aplikasi yang digunakan untuk Ling Na Unisex Hair Saloon di Engkilili untuk meningkatkan kecekapan dalam pengurusannya. Pada masa kini, salon ini menggunakan prosedur manual untuk menguruskan perniagaan dan melibatkan banyak kertas kerja. Pelanggan menggunakan Whatsapp, e-mel dan panggilan telefon untuk membuat janji temu dan staf Ling Na Unisex Saloon akan mencatat butiran janji temu di dalam kertas. Melalui kaedah ini, banyak masalah akan dihadapi oleh pelanggan dan staf seperti kesalahan temu janji, maklumat yang salah direkodkan dan beratur panjang yang menyebabkan pembaziran masa. Selain itu, staf tidak mempunyai cara yang sesuai untuk menguruskan produk dan mereka selalu mengira stok secara manual. Staf juga tidak mempunyai masa yang mencukupi untuk mengesyorkan produk tersebut kepada pelanggan dan ini akan menyebabkan penjualan produk yang tidak ideal. Masalah lain ialah salon tidak mencatat maklumat pelanggan. Maklumat pelanggan adalah maklumat yang mesti disertakan dalam butiran janji temu untuk memudahkan pengurusan janji temu. Oleh itu, sistem pengurusan salon yang dicadangkan dapat membantu Ling Na Unisex Hair Saloon untuk menyelesaikan masalah dan meningkatkan kecekapan dalam pengurusannya. Sistem pengurusan salon yang dicadangkan adalah membantu pelanggan membuat janji temu dalam talian dan butiran janji temu dicatat dalam pangkalan data. Staf dapat menguruskan temu janji secara mudah dengan menggunakan sistem yang dicadangkan dan mereka juga dapat menguruskan produk mereka melalui katalog produk. Selanjutnya, maklumat pelanggan direkodkan setelah mereka mendaftar akaun mereka dan setiap butiran janji temu mengandungi maklumat pelanggan untuk membantu salon mengenal pasti pelanggan mana yang membuat janji temu ini.

CHAPTER 1: INTRODUCTION

1.1 Introduction

Nowadays, some people are still confusing the term between a beauty parlor and salon. A beauty parlor is known as the beauty salon and it is typically the room that caters specifically to the women, as barbershop is for the men but the salon is the place where the owner to run their business that welcomes the men and women by offering the hair cut, coloring and another such type of services. Ling Na Unisex Hair Saloon is one of the salons located at Engkilili which providing multiple types of hair services to the customers and it is running the business for more than ten years but the world is evolving and we cannot use the traditional way to run the business. Thus, advanced IT technology should be used to help the Ling Na Unisex Hair Saloon to run the business.

Without any IT technology, the Ling Na Unisex Hair Saloon is facing some difficulties because they are using the manual procedure to deal with their business. Their customers do not have the proper way to make an appointment and they are using handphone to make the call or send the text messages toward the employees so the employees will record the appointment and service details in a piece of the paper or the notes which will lead to the misplacement problem and causing the long queue. Besides that, the purpose of some customers go to the salon is waiting for the hair services and they seldom focused on the hair product that can provide some benefit for their hair so the product sales is not ideal because the employees are busy to serve their customers and do not have enough times to promote their product. Other issues are the employees or salon owners will be hard to identify the regular customer because they cannot remember the face of customers as the number of customers is large. All the issues will cause the inefficiency of the management.

Hence, the web-based salon management system will be proposed for Ling Na Unisex Hair Saloon to solve their problem and change the paperwork environment. The salon management system will help the customers to make their appointment dynamically by observing the time table and record the appointment into the database so this will overcome the misplacement issue. Besides that, the salon management system also contains the product catalog which will show the product details such as price and description to help the Ling Na Unisex Hair Saloon to promote their product. The salon management system also will record the information of the customers to help the salon to identify the customers.

1.2 Problem Statement

The manual procedure is used by the Ling Na Unisex Hair Saloon before implementing this project and they faced a lot of problems in their working days. The Ling Na Unisex Saloon does not apply any software to run the business so the difficulties are faced by both sides which are the customer's side and salon management side.

On the customer side, customers are facing some difficulties when they make their appointment and always had to visit the salon for an appointment especially the new customers. Thus, the customers might need to keep the daily reminder over mobiles such as phone calls, text messages, and WhatsApp for their appointment and contact the salon via mobile to know their status appointment. Through this method, it will lead to a misplacement issue which causes a long queue and time wastage. Sometimes the human will make the mistake like misheard when hearing the voice of customers on the phone call, wrongly written the appointment of the customers on the piece of the paper, diary or note, and the worst thing is the paper that notes down the appointment detail was lost. Thus, the long queue cannot be avoided when the mistakes are made by the employees so the customers will waste their time

to wait for the services. Some customers may choose to leave the salon if they do not want to wait for the services and this causes the Ling Na Unisex Hair Saloon to loss the customers.

On the salon management side, employees and salon owners also faced a lot of problems before implementing this project. They have to contact the customers through the mobile phone to announce the appointment status so they need to see the note to search for the appointment details before the announcement. As I mentioned before, the employees will make the mistake and the long queue and time wastage cannot be avoided so the salon management will become inefficient. Besides that, the employees and salon owners are difficult to identify regular customers because not every human can remember a large number of customers. Furthermore, the product sales for the Ling Na Unisex Hair Saloon are not ideal because the purpose of the customers go to the salon is for the services and they seldom look at the product. The employees also don't have enough time to promote their product for their customers so it will cause the loss of the income.

Another difficulty faced by the management side is inefficient stock management because the salon owner still records their product manually. Without the management system, the salon owner does not know the total number of the in-stock product so the owner has to count the product manually to get the total number and it is very inconvenient. Hence, the proposed salon management will help both users to solve all the listed problems and improve the quality of management.

1.3 Objective

The objectives of the project are addressing the problems mentioned earlier, a salon management system will be developed. The purposes of this project are:

1. To obtain the requirements to have more understanding of the current issue for the Ling Na Unisex Hair Saloon

In this project, the questionnaires are conducted to gather the user requirement from the user of the Ling Na Unisex Hair Saloon. The user requirement is necessary because it used to get the user opinions to know what is the current issue encountered by them. Besides, it is also help to obtain the user agreement on the proposed solution.

2. To design and develop the web-based system to provide the solution for the problem that encountered by the user of Ling Na Unisex Hair Saloon with the following functionalities:

I. Provide a smart time table that enables users to manage their appointment.

Web-based system that provides the appointment management for the users and the smart time table will be showing on the pages to lets the users know the available time. Through this functionality, the users can make the best decision on their time to avoid the time wastage and the long queue. The users also allowed to set the appointment for multiple services at the same time and all the appointment information will be inserted into the database to ease the users to manage their appointment.

II. Provide the online product catalog to help the Ling Na Unisex Hair Saloon to manage the stock and promote the product.

This functionality is helping the salon manage their products through the product catalog. Thus, the salon can insert the product details into the database and display the product on the informative page to let customers know the available product. It also provides important information like the total number of the in-stock product to manage the stock easily.

III. Record the information of the customer in the database

The system can be used to record the customer information to help the salon identify the regular customers and what kind of service is mostly booked by the customers.

3. To evaluate the system through the functional and non-functional testing to get the user feedback after they test the system

In this project, the test cases are produced to get user agreement and feedback after they are testing the system. The functional and non-functional testing is included to summarize the user requirement whether the user satisfies or dissatisfies with the system or not. The functional testing which is the unit testing, integration testing, and system testing will be conducted to validate each software unit design and increase confidence in changing or maintaining the code. Besides, the non-functional testing which is the usability testing will be conducted to evaluate a product through testing based on the human-centered interaction design.

1.4 Brief Methodologies

The methodology is known as the system of wide standards or rules from which particular strategies or methods which determined to solve the different problems with the scope of a particular study. In this project, the agile methodology that consists of 4 different phases, which are requirement analysis, architecture and design, development, and testing and feedback is applied. By using the agile methodology, the users can see the outcome and understand if he or she is satisfied or not after each iteration of the development.

Phase 1 - Requirement Analysis

The purpose of requirement analysis is transforming the high-level requirements which analyzed from the understanding of problems that have been lead to reliable, unambiguous, traceable, complete, and approved requirements. The questionnaires will be created to collect the data from the community in Engkilili and questionnaires can be open-ended or close-ended. Open-ended questionnaires require the answer that more than one word to know feelings, opinions, and general expressions on process detail or problem. In closed-ended questionnaires, a set of prescribing answers such as yes and no are used and the specific response has to be selected.

Phase 2 - Architecture And Design

In this phase, the prototype is designed to show the layout and navigation of the development system. In the system designing phase, the user for the salon management system is determined, which are admin, employee, and customers. In this phase, the use case diagram is used to show the entity that interacts with the system and the task performed by each entity to

achieve their goal. The sequence diagram will also be used to describe the behavior of objects within the use case by showing the message's description and what object they passed.

Phase 3 - Development

In this phase, we will choose and use the coding and programming language which is suitable for system development. The main language used to develop and implement this project are PHP, HTML, CSS, JQuery, and so on. The text editor is playing a vital role in the development process and it helps us to save time, reduce workloads, and improve efficiency as the text editor will highlighting the syntax error on the code. The Microsoft Visual Studio is the text editor that I will use in this project for coding and development. At the end of this phase, the database should be work fine with the developed system.

Phase 4 - Testing And Feedback

In this phase, the usability and unit testing are proposed in this project. Usability testing is a technique that involves the representative user to evaluate the system or product by testing it. The participant will be asked to undergo and complete several tasks and the observer will observe the participant and record the response of the participant. Usability testing aims to collect the qualitative and quantitative data, test and identify the usability problems, and determine the participant's satisfaction with the developed system. The unit testing is the software development process where the test cases are designed, tested, executed and evaluated their test results. All of these testings will be conducted with the selected group of users whether the system meets their requirements or not. At the end of this phase, we will collect feedback from the users who were testing the system by using the form.